

**REMARKS**

Claims 14 to 19, 21 and 24 to 29 are pending.

Applicants respectfully request reconsideration of the present application in view of this response.

With respect to paragraph one (1) of the Final Office Action, an inquiry was made with the WIPO Office. As a matter of routine, the WIPO Office sends a priority document(s) to all specified patent offices at the time of the publication of the PCT document. In response to the inquiry, the WIPO Office sent another copy of the priority document to the USPTO on 06/01/2004. Accompanying this response are copies of the relevant letters of the WIPO of 08/07/2001 and of 06/01/2004 to the USPTO. It is therefore understood that the certified priority document(s) have been properly provided to the USPTO from the WIPO International Authority. It is therefore respectfully requested that the Examiner acknowledge in the next Office Action or other communication that the priority documents have been received by the USPTO.

With respect to paragraph three (3) of the Final Office Action, claims 14 to 18, 21 and 24 to 29 were rejected under 35 U.S.C. § 103(a) as unpatentable over Siemens, British Patent 900,774 in view of Yajima, United States Patent No. 4,336,215.

Claim 14 is to a thermoelectric component, and includes a first element and a second element, where the first element and the second element are in contact with each other in an area of at least one contact point, and where at least in one vicinity of the contact point, at least one of the first element and the second element includes a ceramic material. While the rejections may not be agreed with, to facilitate matters, claim 14 has been rewritten such that at least in one vicinity of the contact point, the ceramic material includes a filler of one of Cr<sub>3</sub>C<sub>2</sub>, FeCr, and FeCrNi. The recitation of carbides, nitrides, silicides and graphite has been removed.

Claim 29 is to a method, and includes the steps of providing a thermoelectric component, the thermoelectric component including a first element and a second element, the first element and the second element arranged in contact with each other in an area of at least one contact point, at least in one vicinity of the contact point, at least one of the first element and the second element including a ceramic material and arranging the thermoelectric component in one of a thermocouple configured to one of measure temperature and a Peltier element as one of a thermoelectric heating element and a cooling element. While the

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rejections may not be agreed with, to facilitate matters, claim 29 has been rewritten such that the ceramic material includes a filler of one of Cr<sub>3</sub>C<sub>2</sub>, FeCr, FeCrNi and graphite. The recitation of carbides, nitrides, silicides and graphite has been removed.

As regards the obviousness rejections, to reject a claim as obvious under 35 U.S.C. § 103, the prior art must disclose or suggest each claim feature and it must also provide a motivation or suggestion for combining the features in the manner contemplated by the claim. (See Northern Telecom, Inc. v. Datapoint Corp., 908 F.2d 931, 934 (Fed. Cir. 1990), cert. denied, 111 S. Ct. 296 (1990); In re Bond, 910 F.2d 831, 834 (Fed. Cir. 1990)). Thus, the “problem confronted by the inventor must be considered in determining whether it would have been obvious to combine the references in order to solve the problem”, Diversitech Corp. v. Century Steps, Inc., 850 F.2d 675, 679 (Fed. Cir. 1998). It is believed and respectfully submitted that the prior art simply does not address the problems met by the subject matter of any of the rejected claims.

The Final Office Action admits that the Siemens reference does not describe (or even suggest) the presence of any filler materials placed in a ceramic material, where the filler material is one of Cr<sub>3</sub>C<sub>2</sub>, FeCr, and FeCrNi. (See Final Office Action page 3.) Similarly, Siemens does not provide a method pertaining to these filler materials.

The secondary Yajima reference does not cure the critical defects of the Siemens reference, since it only refers to mixing ceramic materials with semi-inorganic block copolymers, for example oxides such as Al<sub>2</sub>O, BeO, MgO, ZrO<sub>2</sub> or SiO<sub>2</sub>, carbides, nitrides, borides, and silicides or ternary or higher compounds of these. (Col. 6, lines 44 to 52.) The Yajima reference refers to additives for adding to ceramic substrates, such as MgO, NiO for Al<sub>2</sub>O<sub>3</sub>, CaO and TiO<sub>2</sub> for ZrO<sub>2</sub>, Al<sub>2</sub>O<sub>3</sub> and Y<sub>2</sub>O<sub>3</sub> for Si<sub>3</sub>N<sub>4</sub>, B, Si and C for SiC, Ni and WC for TiC, and ZrO<sub>2</sub> and CrB<sub>2</sub> for ZrB<sub>2</sub>. (Col. 5, lines 11 to 15.) The Yajima reference simply does not disclose (or suggest) the presence of Cr<sub>3</sub>C<sub>2</sub>, FeCr and FeCrNi, as provided for in the context of the claims.

As the combination of Siemens and Yajima does not disclose or suggest the features of amended claims 14 and 29 as presented, it is respectfully requested that the rejections of claims 14 and 29 be withdrawn.

Claims 15 to 18, 21, and 24 to 28 depend from claim 14 and are therefore allowable for at least the same reasons as claim 24.

With respect to paragraph four (4), claims 14 to 19, 21 and 29 were rejected under

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35 U.S.C. § 103(a) as unpatentable over Bachman, United States Patent No. 2,981,775 in view of the Yajima reference.

The Final Office Action admits that the Bachman reference does not disclose a filler material being one of Cr<sub>3</sub>C<sub>2</sub>, FeCr, and FeCrNi. Moreover, the Bachman reference does not describe (or even suggest) the presence of any filler materials placed in a ceramic material, in which the filler material is one of Cr<sub>3</sub>C<sub>2</sub>, FeCr, and FeCrNi. Similarly, Bachman does not provide a method pertaining to these filler materials.

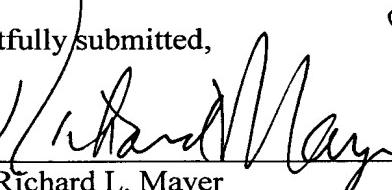
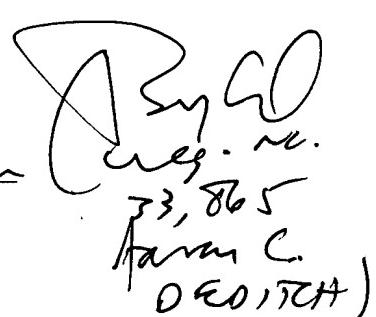
The secondary Yajima reference does not cure the critical defects of the Bachman reference, since it only refers to mixing ceramic materials with semi-inorganic block copolymers, for example oxides such as Al<sub>2</sub>O, BeO, MgO, ZrO<sub>2</sub> or SiO<sub>2</sub>, carbides, nitrides, borides and silicides. The Yajima and Bachman references simply do not disclose (or suggest) the presence of Cr<sub>3</sub>C<sub>2</sub>, FeCr and FeCrNi, as provided for in the context of the claims. It is therefore respectfully requested that the rejections as to claims 14 and 29 be withdrawn.

Claims 15 to 19 and 21 depend from claim 14, and are therefore allowable for the same reasons as claim 14.

Accordingly, claims 14 to 19, 21 and 24 to 29 are allowable.

### **CONCLUSION**

In view of the above, it is believed that the rejections have been obviated, and it is respectfully submitted that claims 14 to 19, 21 and 24 to 29 are allowable. It is therefore respectfully requested that the rejections be reconsidered and withdrawn, and that the present application issue as early as possible.

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## PATENT COOPERATION TREATY

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From the INTERNATIONAL BUREAU

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NOTIFICATION CONCERNING  
SUBMISSION OR TRANSMITTAL  
OF PRIORITY DOCUMENT

(PCT Administrative Instructions, Section 411)

Date of mailing (day/month/year) 07 August 2001 (07.08.2001)
Applicant's or agent's file reference R. 38420 Kut/Hx
International application No. PCT/DE2001/002144
International publication date (day/month/year) 27 December 2001 (27.12.2001)
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## IMPORTANT NOTIFICATION

International filing date (day/month/year)  
07 June 2001 (07.06.2001)Priority date (day/month/year)  
21 June 2000 (21.06.2000)

- By means of this Form, which replaces any previously issued notification concerning submission or transmittal of priority documents, the applicant is hereby notified of the date of receipt by the International Bureau of the priority document(s) relating to all earlier application(s) whose priority is claimed. Unless otherwise indicated by the letters "NR", in the right-hand column or by an asterisk appearing next to a date of receipt, the priority document concerned was submitted or transmitted to the International Bureau in compliance with Rule 17.1(a) or (b).
- (If applicable) The letters "NR" appearing in the right-hand column denote a priority document which, on the date of mailing of this Form, had not yet been received by the International Bureau under Rule 17.1(a) or (b). Where, under Rule 17.1(a), the priority document must be submitted by the applicant to the receiving Office or the International Bureau, but the applicant fails to submit the priority document within the applicable time limit under that Rule, the attention of the applicant is directed to Rule 17.1(c) which provides that no designated Office may disregard the priority claim concerned before giving the applicant an opportunity, upon entry into the national phase, to furnish the priority document within a time limit which is reasonable under the circumstances.
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<u>Priority date</u>	<u>Priority application No.</u>	<u>Country or regional Office or PCT receiving Office</u>	<u>Date of receipt of priority document</u>
21 June 2000 (21.06.2000)	100 30 354.4	DE	25 July 2001 (25.07.2001)

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NOTIFICATION CONCERNING  
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Date of mailing (day/month/year)

01 June 2004 (01.06.2004)

To:

Commissioner  
 US Department of Commerce  
 United States Patent and Trademark  
 Office, PCT  
 2011 South Clark Place Room  
 CP2/5C24  
 Arlington, VA 22202  
 United States of America

in its capacity as designated Office

International application No.

PCT/DE2001/002144

International filing date (day/month/year)

07 June 2001 (07.06.2001)

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The International Bureau transmits herewith the following documents and number thereof:

cop(ies) of priority document(s) (Rule 17.2(a))

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